

REMARKS

The application includes claims 1-12. The claims have not been amended further in this response, and are believed to be in condition for allowance as presented.

Claims 1, 3-6, and 8-10 have been rejected as being obvious over U.S. Patent 6,393,288 to Sollee in view of U.S. Patent 6,671,377 to Havinis, further in view of U.S. Patent 6,466,560 to Lee. Claims 2 and 7 have been rejected as being obvious over the Sollee/Havinis/Lee combination further in view of U.S. Patent 6,741,582 to Mansour. Claims 11 and 12 have been rejected as being obvious over the Sollee/Havinis/Lee combination further in view of U.S. Patent 5,940,761 to Tiedemann. Each of these rejection is traversed.

At the outset, it is noted that the Examiner has pieced together three different references for the primary rejection, and has pieced together four different references for the two additional rejections. There appears to be no motivation to combine the several disparate references in the manner suggested by the Examiner, other than the applicant's own patent disclosure. Thus, the combinations proposed constitute impermissible hindsight. Further, and as discussed in more detail, the combinations proposed by the Examiner, would not yield or make obvious the claimed invention to one of ordinary skill in the art. Rather, as discussed in detail below, the combinations would produce something else entirely different from that which is claimed. Thus, for both reasons presented herein, the claims should be reconsidered, and an allowance should be issued as soon as possible.

Claims 1, 3-6,8-10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sollee et al (US: 6393288), and in view of Havinis et al (US: 6671377), and further in view of Lee et al (US: 6466560). This rejection is traversed.

Sollee teaches a system and method for determining whether a mobile station (MS) is within a specified HomeZone for billing purposes. In the defined method, a service control point (SCP) interfaces with a gateway mobile switching center (GMSC) and a home location register (HLR) in order to make such a

determination. The MSC pages the MS to retrieve location information which is provided to the SCR. The location information is comprised of the mobile's identity, location area code, and Cell ID. The SCR renders its decision after combining this information with MS specific information in the HLR.

Havinis teaches a system and method for mobile stations to download and decrypt potentially sensitive network information. This information could include the position of a base station, for example. Included in the description of the system is a HLR which "is a database maintaining all subscriber information, e.g., user profiles, current location information, IMSI numbers, and other administrative information, for subscribers registered within the PLMN". (Havinis et al, Column 1, lines 58-61)

Lee teaches a method for suitably placing a base station in an existing cellular system. Therein, a description of prior art including a base station positioning method involving a continuous wave transmitter and receiver is described. The mentioned continuous wave receiver is said to be loaded on a vehicle and measure RSSI (Received Signal Strength Indication). By moving the vehicle on which the receiver is loaded, RSSI coverage boundaries are formed for the purpose of determining a proper site for the new base station.

Clearly, the above mentioned references represent disparate subject matter that would not reasonably be combined in an obvious manner by one skilled in the art. The concern of each of the above differs greatly in both scope and focus. Sollee defines a method to deliver information to the billing services side of a network. This differs from Havinis' focus of providing individual users with pertinent information confidentially. Different again, is the focus of Lee's methods, which regards network deployment considerations.

Even if elements of the above inventions could be combined as proposed, they would still not constitute the claimed invention, contrary to the conclusion of the Examiner. The modified system of Sollee, in view of Havinis, and Lee yields the capability to determine if a mobile is located within a HomeZone while simultaneously providing the mobile encrypted network information.

Concurrently, a suitable location for a base station can be determined using interference and RSSI considerations in such a modified system.

Within such a modified system, the determination of whether or not a mobile is within a defined HomeZone, as taught by Sollee, does not constitute the determination of the named location at which a cellular phone terminal unit is located. Further, a mobile's ability to receive downloaded location information concerning positioning of network elements, in the modified network of Sollee in view of Havinis, does not constitute the ability of a cellular phone terminal unit to receive the name of its current location, specific to measured peripheral information. The response to a page sent to the MS in the modified system does not include any location name information or peripheral information measuring unique electric field information as measured at a specific location. The same is true of the location data request made by the MS in Havinis' system. Furthermore, the continuous wave receiver taught by Lee fails to comprise a cellular phone unit at all, since it cannot transmit to a base station, and lacks a keyboard, display device, and memory. Accordingly, the capability of naming locations and correlating them to location specific peripheral information is not provided in the modified or combined system (as suggested by the Examiner). This precludes the existence of a database within the modified system capable of maintaining correlated pairs of location names and peripheral information. Finally, the ability to output location name information to a cellular phone terminal unit, determined by a measure of peripheral information, is not provided in such a modified system, differentiating it from the claimed invention.

Claims 1, 3, 5, 6, 8, and 10 of the current invention require means for transmitting the name of the location to a transmission source of the location request. Sollee in view of Havinis and Lee fails to provide location naming. Sollee provides for the determination of whether a mobile is in or out of a HomeZone, but never names location in order to return location names to the mobile. Additionally, The data regarding determination of HomeZone occupancy is not transmitted to the mobile, it is sent to other network elements. Havinis provides means for transmitting data to the MS, but the data sent does not include user-specific data, including location. Even in view of Lee, no additional functionality can meet this requirement, since the receiver in Lee can make no location request.

Claims 1, 3, 5, 6, 8, and 10 all further require the peripheral information comprises report information that identifies a base station and electric field information measured by the cellular phone terminal unit. Even in view of Lee and Havinis, the system of Sollee cannot satisfy such a requirement. The continuous wave receiver of Lee fails to constitute a cellular phone terminal unit. Such a receiver is not even a constituent of a cellular network, rather it is a measurement tool used for infrastructure planning. Additionally, the receiver maintains no memory, display, or keyboard for input, and can make no location name requests.

Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sollee et al, in view of Havinis et al, in view of Lee et al, and further in view of Mansour (US: 6741582). This rejection is traversed.

The invention of Mansour teaches a means to increase sector capacity in a CDMA cell. Within Mansour a method of updating the HLR to indicate the location of a mobile within a network is described. This invention broadly pertains to network capacity engineering, a focus quite different from those of Sollee, Havinis, and Lee, as discussed above. It is posited that owing to their diverse subject matter, the inventions discussed above would not reasonably be combined in an obvious manner by one skilled in the art.

Even if elements of the above inventions could be combined as proposed, they would still not constitute the claimed invention, contrary to the conclusion of the Examiner. The modified system of Sollee in view of Havinis, Lee, and Mansour does not provide the capability of creating matched sets of peripheral information and location names. It is noted that the Examiner indicates that the IMSI or TMSI data received from the MS in a page_response, as taught by Sollee, constitutes peripheral information. It is respectfully submitted that the Examiner's position in this regard is not correct, and that the IMSI or TMSI data is recognized as a mobile-specific name that does not change with regard to position and contains no electric field information. The IMSI and TMSI uniquely identify the phone or phone user within a cellular system, and do not change with location. Notwithstanding the above, when the HLR of Mansour updates the location of the mobile as it visits different network regions the network region does not constitute a location name. No user-defined location name is ever created or transmitted

between network entities in the combined invention of Sollee in view of Havinis, Lee, and Mansour. Additionally, the detection of a MS within a network does not correspond to a fixed geographical location, owing to the nature of wireless networks. Coverage zones within network areas are not well defined, and may change over time due to a number of considerations. (i.e. user load on the system, multipath propagation, the ad hoc nature of the network, power fluctuations, etc) Thus, registering of a mobile in various network areas does not constitute a suitable form of defining physical location, and is unrelated to the naming of locations.

Specifically, claims 2 and 7 require means for receiving from a registering cellular phone terminal unit a set of peripheral information and a location name that have been correlated with each other; and means for registering to the database the received set of peripheral information and a location name that have been correlated with each other. Sets of correlated location information and peripheral information are not made available in the above combined system, as described above. No suitable pairing of location names and peripheral information is provided in the disclosed invention of Sollee, in view of Havinis, Lee, and Mansour. Furthermore, this information cannot be sent by a cell phone terminal unit according to the descriptions within.

Claims 11 and 12 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Sollee et al, in view of Havinis et al, in view of Lee et al, and further in view of Tiedemann et al (US: 5940761).

The invention of Tiedemann concerns an improvement on hard-handoff procedures in communications systems. Within the handoff attempt, Tiedemann describes a method of recognizing the analog base station with the strongest signal according to digital color codes, in order to assist with subsequent handoffs. This invention regards system handoff procedures, an application that varies greatly from those of Sollee, Havinis, and Lee, as discussed above. Given the diverse nature of their subject matter, it is posited that the inventions discussed above would not reasonably be combined in an obvious manner by one skilled in the art.

Even if elements of the above inventions could be combined as proposed, they would still not constitute the claimed invention, contrary to the conclusion of

the Examiner. Specifically, claims 11 and 12 require the report information comprises communication frequency and color code of a base station. However, even in further viewing of Tiedemann, the modified invention of Sollee, as viewed with Havinis, Lee, cannot provide peripheral information that is comprised of base station color codes. As described in Tiedemann, the information on digital color codes is used to determine at a later time, information to assist in a subsequent handoff attempt (see column 8, lines 44-50 of Tiedeman). As such, the combination of Sollee, Havinis, Lee and Teideman would not make the claimed invention set forth in claims 11 and 12 obvious.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1-12 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,



Michael E. Whitham

Reg. No. 32,635

Whitham, Curtis & Christofferson, P.C.
11491 Sunset Hills Road, Suite 340
Reston, VA 20190

Tel. (703) 787-9400
Fax. (703) 787-7557

Customer No.: 30743